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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/056,271      | 01/23/2002  | Gary R. Janik        | KLA-003             | 8560             |

22888 7590 01/03/2007  
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| EXAMINER |
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STOCK JR, GORDON J

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2877

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/03/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                 |              |  |
|------------------------------|-----------------|--------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |  |
|                              | 10/056,271      | JANIK ET AL. |  |
|                              | Examiner        | Art Unit     |  |
|                              | Gordon J. Stock | 2877         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on appeal brief filed 10/10/06.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,8-21,24,27,33-37,41,43,44,47,51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,8-21,24,41,43,44 and 47 is/are allowed.
- 6) ☒ Claim(s) 27,33-37 and 52 is/are rejected.
- 7) ☒ Claim(s) 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Upon further consideration of the claims, a rejection under 35 U.S.C. 101 has been made to **claims 27, 33-37, and 52**. Subsequently, the final rejection mailed May 17, 2006 (paper 20060509) has been withdrawn. The following action is in response to Appeal Brief filed October 10, 2006.

#### *Claim Objections*

2. **Claim 51** is objected to for the following: on line 8 'small are is vaporized' should read -small area is vaporized-. Correction is required.

#### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 27, 33-37, and 52** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claims 27, 33-37, and 52** are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either physical transformation and/or a useful, concrete and tangible result. The claims fail to include transformation from one physical state to another. Although, the claims appear useful and concrete, there does not appear to be a tangible result claimed. Merely 'performing at least one of single ...analysis on the thin film (the performing an analysis step which is an abstract idea without a tangible result of **claim 27**); performing at least one of single ... analysis on the thin film (the performing an analysis step which is an abstract idea without a tangible result of **claim 37**); measuring the thin film comprising performing an analysis (the measuring step which is an

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abstract idea without a tangible result of **claim 52)** ' would not appear to be sufficient to constitute a tangible result, since the outcome of the performing an analysis/measuring step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. As such, the subject matter of the claims is not patent eligible. **Claims 33-36** are rejected for depending upon a rejected base claim; wherein **claims 33-36** further limiting of the parent claim still does not have a tangible result.

*Allowable Subject Matter*

5. **Claims 1, 8-21, 24, 41, 43, 44, and 47** are allowed over the prior art of record.

**Claims 27, 33-37, 51, and 52** would be allowable over the prior art of record if rewritten to overcome the rejection under 35 U.S.C. 101 and objections above.

As to **claim 1**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a thin film analysis system the particular energy beam source being configured to heat only a small area of the contaminant layer until the small area is vaporized and the particular thin film analysis module, in combination with the rest of the limitations of **claims 1, 8-21, and 24**. In addition, Elliott (5,669,979) fails to teach a thin film analysis system comprising the particular thin film analysis module (Elliot teaches a surface cleaning station comprising a cleaning monitor and illuminating source: Fig. 15 (520, 518)). In addition, see applicant's arguments on pages 13-14 in Appeal Brief filed October 10, 2006.

As to **claim 27**, please see applicant's arguments from line 9 of page 14 to line 12 of page 16 in Appeal Brief filed on October 10, 2006. **Claims 33-37** are allowable by virtue of dependency on allowed **claim 27**.

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As to **claim 41**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a thin film analysis system means for performing analyzing a test sample means for directing an energy beam at the contaminant layer, in combination with the rest of the limitations of **claims 41, 43, 44, and 47**. In addition, Elliott (5,669,979) fails to teach a thin film analysis system comprising the means for directing an energy beam and means for performing analysis on the thin film (Elliot teaches a surface cleaning station comprising a cleaning monitor and illuminating source (Fig. 15: 520, 518). In addition, see applicant's arguments on page 16 line 17 to page 17 line 6.

As to **claims 51 and 52**, please see applicant's arguments on pages 18-19 in Appeal Brief filed on October 10, 2006.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure: U.S. Patent 4,588,885 to Lovoi et al.

U.S. Patent 5,281,798 to Hamm et al.

U.S. Patent 5,204,517 to Cates et al.

U.S. Patent 5,814,165 to Tatah et al.

U.S. Patent 6,930,771 to Rosencwaig et al. (specifically, Fig. 1: 24, 20)

U.S. Patent 7,006,222 to Krishman

U.S. Patent 7,110,113 to Janik et al.

### *Fax/Telephone Numbers*

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

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1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (571) 273-8300*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

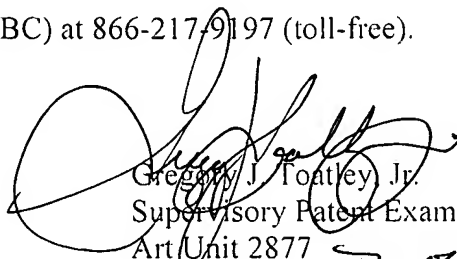
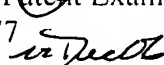
The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



gs  
December 16, 2006

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
Art Unit 2877  


**Gregory J. Toatley, Jr.**  
**Supervisory Patent Examiner**